



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Leamon  
Serial Number: 09/504,330  
Filing Date: February 14, 2000  
Art Unit: 3625  
Examiner: Cuong H. Nguyen  
For: **METHOD AND SYSTEM FOR  
SKILLS-BASED PLANNING AND  
SCHEDULING IN A  
WORKFORCE CONTACT  
CENTER ENVIRONMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO OFFICE ACTION**

**I.**

The Manual of Patent Examination Procedure instructs the Examiner to avoid “[p]iecemeal examination ... as much as possible.” See, MPEP §707.07(g). With all due respect, the most recent Office action violates this requirement.

On November 25, 2003, the Examiner issued a non-final Office action that raised just one issue – whether claims 1-7, 12-17, 19-24, 26-28 and 30-31 satisfied the requirements of §101, Title 35. At that point in time, the claims were in full compliance with the requirements of §§ 102 (novelty), 103 (non-obviousness) and 112 (adequate disclosure). A Personal Interview was held at the Office on January 28, 2004, at a not-insignificant expense to the Applicant. During the Interview, there was no mention whatsoever of any prior art concerns and, indeed, there were none existing at the time. The only substantive issue discussed during the Interview was the then-pending §101 rejection.

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(See, Interview Summary, dated January 29, 2004).<sup>1</sup> Claim amendments to address the then-outstanding §101 rejection were proposed, and the Examiner received them favorably. While no formal indication of allowable subject matter was made during the Interview, there were no other issues raised. Less than one week later, on February 3, 2004, the Applicant submitted a formal response, requesting minor revisions to each independent claim to address the §101 rejection. Because there were no other substantive issues, Applicant then expected to receive a Notice of Allowance.

Yet, on April 27, 2004, another non-final Office action was mailed. As expected, the §101 rejection was withdrawn. Nevertheless, a new ground of rejection was raised, namely, that claims 1-7, 12-17, 19-24, 26 -28 and 30-31 were still unpatentable under §103(a) in view of the purported combination of Crockett et al. '292, the Klenke article, and newly-cited Neyman et al. '600.

Crockett et al. '292 and the Klenke article have been of record and were the primary references relied upon by the Examiner in several prior office actions. They remain the primary references in the most recent action.

At the outset, there is no reason (and there is no reason stated in the record) why the Neyman et al. patent has only now been cited. Indeed, the reference clearly could have been cited earlier, as it has been available to the Examiner since late 2002. Importantly, the Examiner's citation of this new art was not motivated by anything Applicant has done. This is not the usual situation where an Examiner does a new search because claims have been amended to address a prior art rejection. Indeed, on November 25, 2003, the Examiner here stated that the then-pending claims (which are similar in scope to the present claims) "have been amended ... to overcome [] prior art rejections" that had been based (at that time) on a combination of Crockett et al. '292 and Klenke. In other words, as of November 2003 (when only the §101 issues remained), there was no question that the claims were patentable. Nothing has changed.

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<sup>1</sup> In describing the substance of the Interview, the Examiner said that the discussion involved "[m]odifications to overcome 35 USC 101 rejections on technological art for ... independent claims are proposed; and the applicant confirmed this application has the same assignee of IEX corporation as in US Pat. 6,044,355."

Nevertheless, now the Examiner urges a new position that is clearly not defensible. The most troubling issues are a pair of statements made by the Examiner on page 1, paragraph 3 of the most recent action. In particular, the Examiner begins his new Office action by stating:

In the interview on 1/28/2004, the critical issue that the applicant wants to make it stand-out in the inventions is an ability of ACD to predict or forecast based on schedule simulation. This was taught by a combination of [the cited references].

Applicant takes issue with the Examiner's new characterization of the Interview. As described above, the only substantive discussion that took place during the Personal Interview involved the §101 rejection. All prior art issues had been addressed previously and, as noted above, the Examiner had by that time admitted that the then-pending claims "[had] been amended ... to overcome [] prior art rejections." (Office action, November 25, 2003, page 1). With all due respect, it is not the case that statements or arguments were presented to the Examiner (during the Interview) about some alleged critical issue that purported to distinguish this invention over the prior art. No such statements or arguments were ever made, and there is nothing in the Examiner Interview record that would support this contention. Why would Applicant have made arguments - regarding how the invention allegedly distinguished over the prior art (the "critical issue") - if there were no pending art rejections?

The Examiner further mischaracterizes the record when he states in the next paragraph of the most recent Office action that "applicant argue[s] that 'there is no disclosure of forecasting for future contacts,'" which the Examiner then purports to find in the cited references. First, this limitation is not the present invention. More to the point, this statement/argument was never made during the Personal Interview, or in the February 4, 2004 response to the then-pending Office action. Indeed, in searching the record, it appears that the Examiner simply is reiterating an argument that he made during an earlier cycle of the prosecution - an argument that was later withdrawn. In particular, the Examiner made the same argument (to prior counsel) in the April 23, 2003 Office action, and the Applicant formally addressed this contention in the September 2, 2003 response (*see*, page 7, where Applicant notes that the Examiner only offered a partial quotation and

that, in any event, the cited language was not the claimed invention). Applicant presumed that the matter involving the “no disclosure of forecasting for future contacts” statement (raised by the Examiner in April 2003 and rebutted in September 2004) had been fully and finally resolved long ago. There is certainly no reason or basis for the Examiner to raise it again now. Moreover, the argument is unfairly applied here (not only because it is wrong), but because the Examiner had previously admitted that the prior art rejections had been overcome.

The Examiner’s 180° change of position is fundamentally unfair. Applicant spent the better part of a year convincing the Examiner of the deficiencies of the purported combination of Crockett ‘292 and Klenke, and the Examiner previously indicated that the Applicant had succeeded in this regard. Nothing happened or was said during the Interview to cause the Examiner to go back and re-apply the Crockett/Klenke combination yet again. This is a piecemeal prosecution in violation of MPEP §707.07(g).

## II.

The new §103(a) rejection is respectfully traversed. In the first instance, it should be appreciated that the new rejection is really not new at all. The most recent Office action merely cites the same portions of Crockett et al ‘292 and Klenke (and makes the very same arguments concerning these references) that were previously made by the Examiner and that were previously withdrawn (in the November 25, 2003 Office action). The only thing “new” is the Examiner’s unsupported characterization about what happened at the Interview (and, in particular, that Applicant allegedly argued concerning the importance of forecasting based on schedule simulation). As noted above, the subject of the Interview involved the then-pending §101 rejection, and nothing more.

More to the point, Neyman et al. ‘600 adds nothing new to the combination of Crockett et al. ‘292 and Klenke. Neyman et al. describe a telephone call center as well as methods and systems for emulating a call center environment. The text in column 15, lines 37-40 indicate that this functionality can be used to do “a simulation.” Presumably, this is why the Examiner suggests that Neyman et al. ‘600 teach using “a simulating program” in an ACD environment.”

The Examiner, however, has failed to appreciate that Neyman et al. is merely cumulative of Klenke, which stated the following:

Traditional tools for scheduling will need to be modified to deal with this new kind of [skills-based] environment as well. That change must recognize, more clearly than is normally done at present, the long range vs. short-range scheduling issues. On a long-range basis, an effort must be made to ensure a reasonable coverage of scarce skills.

For short-range scheduling, like for the next day, more detailed planning can be done, since more information is available about the agents that will actually be there throughout the day. At this point, a simulator will be needed to help adjust individual employees' skill assignments and, to a lesser degree, their schedules so that optimal coverage is provided. The concept of creating an optimal set of schedules for a long period of time is meaningless, for all practical purposes. (page 51, emphasis supplied).

In other words, Klenke already suggested use of a “simulator ... to help adjust individual employees' skill assignments and [] schedules” – which is the subject matter purportedly added (to the combination of Crockett '292 and Klenke) by the newly-cited Neyman et al. '600 patent. As noted above, however, the Examiner had previously withdrawn his prior rejection of the claims based on Crockett '292 and Klenke. Thus, inclusion of Neyman et al. now does not add anything, as the reference's teaching about a simulator was already suggested in the Klenke reference.<sup>2</sup>

Stated plainly, the Office does not meet its burden to establish a §103 rejection by first admitting claims are patentable over the combination of A+B while then contending that the same claims are not patentable over the new combination of A+B+C, where (as here) C is cumulative to B.

As has been previously argued, Klenke does not describe forecasting for future contacts based upon created contacts and requirement allocations. Klenke discloses

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<sup>2</sup> The Examiner will also appreciate that the simulation concept is described in Crockett et al. U.S. Patent No. 6,044,355, which matured from 08/890,228, the related application identified on page 1 of the specification. The Applicant presumes that the '355 patent is of record, as it was identified by the Examiner during the Interview.

determining a gap in the present group of skilled agents, but she does not address allocating forecasted or future contacts and agent requirements based upon the given contact and requirement allocations. In Klenke, no allocation of forecasted agent requirements occurs. Instead, present-time skills for a group of agents are discovered and perhaps compensated for through the employment of new agents. Klenke's skill matrix is used to create the call types that are to be handled on the ACD. This matrix is not the forecasting and allocation of future contact and agent requirements.

Klenke is directed to sorting the skills of agents. The reference does not describe forecasting future uses of skills for agents. Klenke instead states that an agent can be entered into more than one skill group at a time. Entering an agent into a skill group is a function of the agent's present skill sets, but it does not take into account future needs of agent skill sets or agents with specific skill sets, as is claimed in claim 1. Additionally, Klenke is not directed to allocating future contacts or loads of callers. It is directed to the present allocation of agents to skill groups, not to future allocations of contacts to skill groups based upon created contact and requirement allocations. The element of allocating future contacts based upon simulating skill routing is not disclosed or suggested.

An example of forecasting for future contacts, based upon created contact and requirement allocations, is found in the specification on page 9, line 23, through page 10, line 4. Referring also to Figure 1, the lines between business units and call types reflect such allocations in a representative embodiment. Allocations can be generally defined as planning the future distribution of a service or support. An example of allocating is on page 9, wherein the inventor states that "two levels of allocations are implemented when [business units] are utilized in a skills-based routing environment. The first level is to allocate a percentage of business unit calls to multiple ACDs (call types). The second level is to allocate requirements from each ACD call type to one or more [management units]." Thus, in contrast to Klenke, there is no planning for the future, and an agent skills matrix is created merely to determine if agent skills align with present caller needs.

Klenke even admits the deficiencies of the prior art when she states:

The dark side of the skills-based routing feature is that there are few automated tools to make this process easier for the call center manager. The agent skills matrix and the routing pattern are designed by

brute force, and when an agent is hired, fired or trained in a new skill, calls in sick or goes to a meeting, or when caller needs change, these also must be changed (page 51, emphasis supplied).

The present invention addresses these deficiencies in a certain way, and in a specific contact center environment – one that is organized into a hierarchy of one or more business units at a first level, one or more contact types at a second level, and one or more management units at a third level (see, claim 1, 17, 22 and 26). These “environment-specific” elements are affirmative limitations that are neither disclosed nor suggested by the prior art of record.

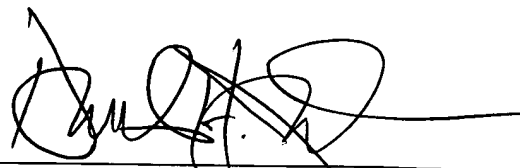
Applicant will not reiterate each and every argument that was previously presented (in the Office action response, dated September 2, 2003) and that proves why the pending claims are patentable over the primary references: Crockett et al. '292 and Klenke. For all intents and purposes, those arguments were accepted once by the Examiner (in the November 25, 2003 office action) and, thus, they are incorporated herein by reference. Further, as noted above, Neyman et al., the purported new reference, is cumulative of Klenke; as a consequence, the new rejection necessarily must fail for the same reasons previously advanced (and accepted by the Examiner) in the September 2, 2003 response.

There is no factual or legal basis for the Office to continue this piecemeal examination given the requirements of MPEP §707.07(g). The Examiner once acknowledged that the primary references failed to describe the inventive subject matter. Neyman et al. is clearly cumulative and, thus, it adds nothing new.

Because the Examiner continues to fail to meet his obligation to establish *prima facie* obviousness of any pending claim, a Notice of Allowance is respectfully requested.

Respectfully submitted,

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